

Amendments to the Claims

The following listing of claims will replace all prior versions and/or listings of claims in the application:

Listing of Claims:

1-10. (cancelled)

11. (currently amended): A method to remove volatile contaminants from a volume of ~~earth~~soil, comprising:

~~placing at least one conduit in soil, wherein the at least one conduit includes openings;~~
~~heating the contaminated soil to vaporize contaminants in the soil by flowing hot gas~~
~~through the at least one perforated conduit positioned in the soil; and~~

~~maintaining pressure within in the at least one perforated conduit below a pressure in the~~
~~soil to inhibit transport of the combustion hot gas from the at least one perforated conduit to the~~
~~soil; and and to draw~~

~~—drawing vaporized contaminants into the at least one perforated conduit from the~~
~~contaminated soil.~~

12. (currently amended): The method of claim 11, wherein a plurality of perforated conduits are used, wherein portions of the perforated conduits that have openings are oriented substantially horizontal to the ground surface, and wherein the ~~plurality of perforated~~ conduits are laid out ~~in a substantially parallel orientation to each other~~ with direction of hot gas flow in adjacent conduits in opposite directions.

13. (currently amended): The method of claim 11, wherein a plurality of perforated conduits are used, wherein portions of the perforated conduits that have openings are oriented substantially horizontal to the ground surface, and wherein the portions of the perforated conduits that have openings are placed between about one and about 10 feet into the soil relative to the

ground surface.

14. (currently amended): The method of claim 11, wherein the at least one conduit is placed ~~within~~in a trench, and wherein the trench is filled with soil produced during formation of the trench after the conduit is placed in the trench.

15. (currently amended): The method of claim 11, wherein the at least one conduit is placed ~~within~~in a trench, and wherein the trench is filled with uncontaminated fill material after the conduit is placed in the trench.

16. (currently amended): The method of claim 11, wherein the at least one conduit is placed ~~within~~in a trench, wherein the trench is filled with uncontaminated fill material after the conduit is placed in the trench, and wherein the fill material has a greater permeability than soil removed from the trench.

17. (previously presented): The method of claim 11, further comprising thermally degrading at least a portion of the vaporized contaminants.

18. (currently amended): A method of in situ removal of volatile contaminants from contaminated soil, comprising:

heating a conduit positioned in soil by drawing a hot fluid through the conduit, wherein the conduit comprises openings adjacent to the soil, and wherein a pressure ~~within~~in the conduit is maintained below a pressure outside of the conduit to inhibit mass transfer from the conduit to the soil and to promote mass transfer of vaporized fluid from the soil into the conduit;

heating the contaminated soil by conduction from the conduit to ~~vaporize contaminants~~;
and

drawing contaminants from the soil into the conduit.

19. (previously presented): The method of claim 18, further comprising removing contaminants from gas that has passed through the conduit.

20. (currently amended): The method of claim 18, wherein a section of the conduit having openings is positioned ~~within~~in the soil in a substantially horizontal orientation.

21. (currently amended): The method of claim 18, wherein the conduit is positioned ~~within~~in the soil ~~between~~at a depth of ~~from~~about 4 inches to about 10 feet from the surface.

22. (previously presented): The method of claim 18, wherein a blower draws hot fluid through the conduit and draws contaminants from the soil into the conduit.

23. (previously presented): The method of claim 18, wherein the hot fluid comprises combustion gas from a burner.

24. (currently amended): The method of claim 18, wherein a portion of the conduit is placed ~~within~~in a trench ~~within~~in the soil, and wherein the trench is filled with soil produced during formation of the trench after the conduit is placed in the trench.

25. (currently amended): The method of claim 18, wherein a portion of the conduit is placed ~~within~~in a trench ~~within~~in the soil, and wherein the trench is filled with uncontaminated fill material after the conduit is placed in the trench.

26. (currently amended): A method to remove contaminant from a contaminated volume of soil, comprising:

passing hot gas through a first conduit that is positioned ~~within~~in soil, wherein a portion of the first conduit comprises openings positioned ~~within~~in the soil, wherein the hot combustion gas flows in a first direction through the first conduit, and wherein a pressure ~~within~~in the first conduit is maintained below a pressure ~~within~~in the soil to inhibit passage of gas from the first conduit into the soil and to promote passage of contaminant from the soil into the first conduit;

passing hot gas through a second conduit that is positioned ~~within~~in the soil, wherein a portion of the second conduit comprises openings positioned ~~within~~in the soil, wherein the

portion of the second conduit is oriented adjacent and substantially parallel to the portion of the first conduit, wherein the hot combustion gas flows in a second direction through the second conduit, and wherein a pressure ~~within~~in the second conduit is maintained below a pressure ~~within~~in the soil to inhibit passage of gas from the second conduit into the soil and to promote passage of contaminant from the soil into the second conduit;

heating the soil at least in part by conduction from the first conduit and the second conduit; and

removing contaminants from the soil by drawing contaminants into the first conduit or into the second conduit.

27. (previously presented): The method of claim 26, wherein the first direction is substantially opposite to the second direction.

28. (previously presented): The method of claim 26, wherein the hot gas passed through the first conduit comprises combustion gas from a burner.

29. (currently amended): The method of claim 26, wherein the first conduit is placed ~~within~~in a trench ~~within~~in the soil, and wherein the trench is filled with soil produced during formation of the trench after the first conduit is placed in the trench.

30. (currently amended): The method of claim 26, wherein the first conduit is placed ~~within~~in a trench ~~within~~in the soil, and wherein the trench is filled with uncontaminated fill material after the first conduit is placed in the trench.